Before the
Federal Communications Commission
Washington, D.C. 20554

In Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	CC Docket No. 95-185

WALLER CREEK COMMUNICATIONS, INCORPORATED COMMENTS IN RESPONSE TO SECOND FURTHER NPRM

NOW COMES Waller Creek Communications, Inc. (WCC) and submits the following comments in response to the Second Further Notice of Proposed Rulemaking (FNPRM) released by the Commission in the above-referenced matters.

I. Introduction

WCC is a CLEC based in Austin, Texas. WCC is a privately-held, entrepreneurial company that is investing over $100,000,000 in deploying its initial networks in five Texas metropolitan areas. WCC's networks will provide ubiquitous coverage of the metropolitan areas where the company serves. By year-end, WCC will be collocating in approximately 150 offices in Austin, Dallas, Fort Worth, San Antonio, and Houston. WCC provides its customers with "DSL Plus." The DSL services currently in development offer all the advanced, high speed capabilities available from digital subscriber line technologies. The "Plus" is the ability to offer wholesale transport services to other carriers.

WCC will deliver transport capacity to wholesale customers at high bandwidth levels, which will be used by the customers according to their end users' needs. The initial WCC networks will have the transport capacity to simultaneously support the equivalent of over 2,600,000 telephone lines per metropolitan area, or over 10,000,000 telephone lines in Texas. WCC's network will move competition beyond the urban core and into the smaller cities and suburban areas in our service territory. By eliminating its

customers' dependence on the ILEC for wholesale services, WCC's "carrier's carrier" services will give its wholesale customers a fighting chance to offer ubiquitous retail services to residential and business customers in WCC's service areas.

In each metropolitan market, WCC is building a host site, where customers can, at their election, locate their equipment, inexpensively and with the full support and cooperation of WCC. From the host site, WCC will distribute services via a combination of WCC deployed technology and fiber facilities and currently unused or underused fiber leased from the incumbent local exchange company (ILEC) to WCC's collocated equipment in the ILEC's central offices. WCC's network will carry its customers' traffic all the way from the WCC host site to the terminating ILEC central office and through the cross-connect to the local loop. To reach an end user, the wholesale customer would need to purchase nothing from the ILEC but a loop, WCC provides the rest. For customers unwilling or unable to order loops from the ILEC, WCC will order the loop for them. Wholesale customers who choose to deal exclusively with WCC would not be required to interface with the ILEC at all.

WCC expects that when its networks are fully deployed, WCC's service offerings will have a substantial impact on competition in the markets it serves. WCC is deploying new technologies at its host sites and in the ILEC central offices. WCC considers itself a technology company as much as a telecom provider, and is committed to developing creative ways to put the latest technologies at the service of its customers' communications needs. WCC is not waiting for the ILEC to deploy this technology in the marketplace.

In implementing its business plans, WCC has repeatedly "pushed the envelope" of local competition.[1] WCC's ability to build an independent new company into an

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[1] WCC does not ask the reader to take its word for this, but rather to review various statements Southwestern Bell Telephone Company (SWBT) has made about WCC. WCC's business plans have "pushed the envelope," and its activities are "unprecedented and controversial." *Complaint by Waller Creek Communications, Inc. For Post-Interconnection Dispute Resolution With Southwestern Bell Telephone Company*, Public Utility Commission of Texas Docket Nos. 17922 and 20268, SWBT's Initial Brief, at 3 (April 22, 1999). SWBT has criticized WCC in regulatory proceedings for adding advanced capabilities to its networks. In one hearing, SWBT summarized its problems with WCC's plans by concluding, "So this really is a network of the future." Docket No. 17922, Implementation Hearing, Tr. at 131 (Oct. 21, 1998). The achievements of which WCC is most proud have typically been the ones most vociferously criticized by its ILEC competitor SWBT.

innovative force in telecommunications has been in no small measure due to the forward-looking policies of the Public Utility Commission of Texas (PUCT) regarding collocation and availability of unbundled network elements (UNEs). WCC's interconnection agreement with SWBT authorized a form of collocation that is essentially a precursor to the cageless collocation option recently approved by the Commission. WCC is using its collocation rights to deploy equipment ubiquitously (i.e., in all SWBT central offices) in the metropolitan areas it serves.

WCC's reliance on UNEs is very limited compared to many CLECs, but it could not have built its extensive networks without cost-based UNE access to the network "raw materials" that connect central offices to one another and to end user customers. Most notably, WCC has relied on the PUCT's unbundling of dark fiber, and its requirement in the WCC/SWBT interconnection agreement that SWBT grant WCC access to fiber information on a "parity" basis with what SWBT provides to itself. WCC has used dark fiber extensively on an interoffice basis to connect its collocation sites and is using "loop" dark fiber to reach from SWBT central offices and WCC host sites to end user customers.

The Texas Commission's decision to make dark fiber available as a UNE, as well as WCC's aggressive and extremely productive use of dark fiber,[2] obviously have been important to WCC. In assessing the task before the Commission regarding the remand of Section 51.319, however, WCC believes that the appropriate inquiry should not focus simply on particular UNEs, or on the question of which UNEs are "on the list." Rather, the Commission's response to the Supreme Court's mandate should create a framework for determining which network elements (both today and in the future) meet the standards of the Telecommunications Act of 1996[3] (the 1996 Act). Based on its experiences, WCC has created such a framework, which it believes provides a workable construct for analyzing UNE availability consistent with the terms of the 1996 Act and the Act's

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[2] To WCC's knowledge, no other CLEC in the nation has used dark fiber as extensively as WCC.WCC must note that its extensive use of dark fiber has been strenuously resisted by SWBT, and that issues concerning implementation of the dark fiber provisions of WCC's interconnection agreement remain pending before the PUCT.

[3] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, *codified at* 47 U.S.C. §§ 151 *et seq.*

command to encourage competitive entry and technological advancement. WCC's comments in this proceeding focus on describing this framework for identifying UNEs and exploring the implications of its implementation.

II. A Framework for Identifying UNEs.

A. The Need for a Network Element Framework.

WCC agrees with the Commission's statements of the numerous goals that must be achieved in identifying UNEs in this proceeding. In the FNPRM, the Commission found these goals include: (1) establishing certainty in the marketplace, to "allow carriers to make informed and rational business decisions in order to provide service on a competitive basis to consumers;"[4] (2) implementing network unbundling under the 1996 Act in a way that "can best facilitate the rapid and efficient deployment of *all* telecommunications services, including advanced services;"[5] and (3) responding to the Supreme Court's command to "take a hard look" at when ILECs must make UNEs available, taking into account the "necessary" and "impair" standards under the 1996 Act.[6]

The Commission's goals will be achieved most successfully by going beyond a simple review of the list of UNEs identified in the *Local Competition First Report and Order*. The Supreme Court did not disagree with the UNEs identified in the *Local Competition First Report and Order*, but ruled that the Commission must give additional consideration to the governing standards of the 1996 Act in its identification of UNEs. additional consideration of the governing standards of the 1996 Act. In a sense, the Court did not dispute the Commission's answer to the problem the Act required it to solve, but rather held that the Commission must show its workpapers and calculations before the answer will be accepted. In "showing its work," the Commission would be well served by presenting an intellectual construct that supports the particular UNEs identified in this

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[4] FNPRM, at ¶ 2.

[5] Id., at ¶ 3 (emphasis in original).

[6] Id., at ¶ 4.

proceeding. This framework also could serve in the future to guide industry participants' understanding of what standards will apply to the designation of UNEs, or discontinuance of the availability of existing UNEs.

A network element framework is also important to establishing the market certainty that encourages investment, innovation, and deployment of new technology. If industry participants understand the "rules of the road" regarding the Commission's treatment of various categories of UNEs, investment decisions will be much more informed (and investments thus more likely) than if the Commission produced only a revised list of UNEs. Even though the identification of UNEs may change in the future, a coherent framework that guides how those changes will occur is vitally important. As discussed in the following section, certain categories of UNEs are so fundamental to achievement of competition that the standards should be extremely high for removing them from treatment as a UNE under the 1996 Act. A framework that sets forth the standards and explains the justifications for various standards fosters a productive environment for increased network investments.

Finally, an intellectually consistent network element framework will encourage development of advanced services. Companies like WCC, focused on moving advanced technologies into the marketplace for use by all types of carriers and end users, do not necessarily need a "laundry list" of UNEs. Rather, they require access to the fundamental building blocks of the network that make efficient market entry possible. New technologies and services will be made available most quickly if innovators are assured of cost-based rates for the raw materials that move all types of communications from one point to another. These ***technology independent raw materials*** are not available elsewhere, as will be discussed herein, and innovators must be confident in the availability of raw materials as cost-based UNEs if advanced service investments are to proceed as rapidly as possible. A framework that ensures raw materials are available as UNEs avoids the need for the Commission to attempt to regulate technology, which is both nearly impossible and typically counterproductive. It also ensures that as new technologies become available, the ILECs are not the only parties with sufficient access to network raw materials to implement them.

B. Establishing the Network Element Framework.

A framework for identifying UNEs should recognize differences between categories of UNEs. The nature of the categories created will impact the "necessary" and "impair" analyses, and will guide the factors to be considered in evaluating the availability of elements outside the ILECs' network. The analytical categories that WCC believes best reflect the statutory standards are the following: (1) Raw Materials UNEs; (2) Enabling Function UNEs; and (3) Business Enhancement UNEs. Each of these categories is described in this section.

1. Raw Materials UNEs. *The fundamental "technology independent" network components that are essential for competitors to carry traffic of any type and create the possibility of ubiquitous communication services.*

As the Commission recognized in the FNPRM, there are certain network elements that all industry participants and policymakers recognize must be unbundled for competition to be possible. This recognition was the underlying rationale for the Commission's "strong expectation" that the local loop will be found to meet the unbundling standards of the 1996 Act.[7] In WCC's experience, however, the critical point is not so much to distinguish "loops" from other elements, but to ensure the availability and efficient use of the various transmission media that are embedded in the incumbents' networks.

For example, WCC's networks in Texas use interoffice fiber, as well as loop and sub-loop fiber and copper, to connect numerous types of equipment and technologies. The raw material is the fiber and copper. As long as it is available, WCC can design its own sites and its collocation configurations to optimize available technologies. In fact, WCC can and does install equipment and technology that actually enhances the capacities of the raw materials themselves (SWBT, as of today, does not deploy such technology.) WCC is not attempting to leverage the functional capabilities of the ILEC's network technologies when it utilizes the raw materials. Rather, WCC is using the raw materials, which are blind to the technologies attached to them, to build advanced networks of its own.

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[7] FNPRM, at ¶ 32.

Raw materials UNEs should include those network elements that are not dependent on or defined by a particular type of technology, but are vital to a competitor's ability to carry traffic between locations. In essence, raw materials include transmission media and the basic components necessary to make them functional. For example, raw materials would include copper and fiber (interoffice, loop, and sub-loop), as well as microwave or other wireless technology if used by the ILEC for local transmission (e.g., in remote rural areas).[8] The category would include transmission equipment located in the loop segment of the ILEC's network (e.g., digital loop carriers), so that the availability of transmission is not artificially limited by the ILEC's existing technology arrangements. To ensure the usefulness of the raw materials, the category would include the distribution frames (MDF, DSX-1, DSX-3, or fiber distribution frames where the necessary cross-connects are made) and the power supply necessary to make the transmission equipment run.[9]

2. Enabling Function UNEs. *The information, data, and means of gaining access to necessary ILEC facilities. These functional UNEs enable use of the basic raw materials.*

Enabling Function UNEs can be replaced more easily than raw materials as competition develops, but currently are vitally important to the development of competition. Enabling functions are distinct from raw materials in that they involve the

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[8] When WCC refers to these transmission media, it is referring to facilities already in place in ILEC networks. WCC is not suggesting, for example, that ILECs would be required to install new fiber to satisfy a UNE availability requirement where fiber is not part of installed plant.

[9] Obviously, some raw materials components are located inside ILEC central offices while others are part of outside plant. When equipment at a central office is connected to equipment in the feeder, distribution, and drop sections of the outside plant, it becomes part of a "Loop Transport System" which creates what has been traditionally called a "local loop." Location of the relevant equipment will vary, but the central concept is the availability of elements that connect transmission media in ways that make them usable for carrying traffic. WCC believes that all such "Transport Systems" should be also be considered a "raw materials UNE." It is important to note that such a "Loop Transport System" is often deployed using technologies that benefit only the ILEC and the ILEC's business plans. WCC is more interested in the raw materials (typically fiber and dry copper) than in the ILEC-chosen technology used in the "Loop Transport System" UNE because WCC believes that it can do a better job in the marketplace in using these Raw Material UNEs to provide next-generation technology and services. Creating a UNE list that inherently gives the Monopoly ILEC a way to plan the obsolescence of its own technology and dictate innovation in the marketplace is bad public policy. The 1996 Act entrusts competition, not the ILECs, to drive technology deployment in the marketplace.

use of ILEC information or functionalities. For example, dark fiber constitutes a raw material. The information held by the ILEC concerning the location of dark fiber does not constitute the raw material itself, but is contained in ILEC databases or maps. Cost-based, parity access to this information is critical if the dark fiber is to be used effectively. Access to the facilities location information should be available as an enabling function UNE. In the event that such information became available from a superior source (for example, cost-based direct access to the relevant ILEC databases), then the enabling function UNE would no longer be necessary. Similarly, the cross-connect of dark fiber to an ILEC distribution frame is a basic raw material. The function of the ILEC performing the cross-connect is an enabling function. The enabling function could be rendered unnecessary if CLECs are given the right to perform cross-connects on the various distribution frames themselves.

In addition to information and data functions, enabling functions would include switching and multiplexing functions, which are independent of "Loop Transport Systems." In contrast to raw materials, these elements require use of ILEC functionalities, and are more tied to ILEC technological legacies and choices than is use of basic raw materials.

3. Business Enhancement UNEs. *Elements that allow integration of ILEC personnel or services into competitive offerings.*

This category includes functions that actually involve ILEC personnel or products. These elements enhance a CLEC's competitive offerings, but are much less critical to the competitor's basic ability to operate or construct competitive network services. For example, operator services and directory assistance information services fit in this category, as would white pages directory listings.[10]

The following provides a summary of the network element framework proposed by WCC, including examples of network elements that could be included in each category. The examples are not intended to be exhaustive, nor do they represent WCC's

[10] WCC understands that certain examples of Business Enhancement UNEs are on the "edge" of what is typically considered a UNE versus a service. As discussed below, WCC does not advocate inclusion of particular items in the Business Enhancement UNE category, but uses them as examples of what would be included in this category in the UNE framework.

preferred outcome for a listing of UNEs. The listed items are merely examples of the various UNE types.[11]

Raw Materials UNEs

The fundamental "technology independent" network components that are essential for competitors to carry traffic of any type and create the possibility of ubiquitous communication services.

- Copper (interoffice, loop, and sub-loop)
- Fiber (interoffice, loop, and sub-loop)
- Microwave, wireless (e.g., where used by ILEC for local transmission in rural areas)
- Transmission equipment in the loop (e.g., digital loop carriers, DSLAMs)
- Distribution Frames (MDF, DSX-1, DSX-3, Fiber)
- Power supply

Enabling Function UNEs

The information, data, and means of gaining access to necessary ILEC facilities. These functional UNEs enable use of the basic raw materials.

- Performance of cross-connects
- Access to databases (e.g., Signaling Networks, Directory Assistance, 911)
- Access to information regarding facilities (e.g., location, status and make-up of raw material UNE facilities)
- Pre-ordering and "qualification" information and systems
- Other OSS functions
- Switching functions
- Multiplexing

Business Enhancement UNEs

Elements that allow integration of ILEC personnel or services into competitive offerings.

- Operator and directory information services
- Directories (e.g., white pages)
- Billing & Collection

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[11] This listing also serves to fulfill the Commission's request, stated at NPRM ¶ 33, that commenting parties identify where network elements identified in the *Local Competition First Report and Order* would fit in the analysis presented in their comments in this proceeding.

III. Implementing the Network Element Framework

WCC suggests that implementation of the network element framework would provide a coherent, flexible construct for the Commission to use in identifying UNEs. Any method of identifying UNEs, however, must be responsive to the issues raised in the FNPRM. This section addresses several of the FNPRM's questions in the context of the network element framework proposed by WCC.

A. Evidentiary Standards and Burden of Proof (FNPRM ¶ 12).

The standards for creating or deleting an available UNE should be tied to the importance of the UNE and the likelihood that it will remain necessary to advance investment, technological innovation, and competitive entry. It should be more difficult to challenge the existence of a UNE that is a core network element that one where technological or competitive changes are likely to diminish the need for treatment as a UNE. The network element framework incorporates this concept by establishing categories of UNEs.

The framework sets forth a "hierarchy" of UNEs. Raw materials UNEs are the most essential, least easily replicable, and are not linked to particular technologies. The standard for deleting raw materials from the list of UNEs must be extremely high. At a minimum, a standard such as "clear and convincing evidence" should be imposed for requests to limit availability of a raw materials UNE. The high standard is appropriate for two reasons. First, raw materials are the set of UNEs most critical to deployment of advanced services and new technologies. Without availability of raw materials, technology-oriented companies like WCC cannot build advanced networks. Second, because of the pre-eminent importance of raw materials, this category of UNEs should not be subject to constant attack and revision. One of the primary benefits of a network element framework is that it provides certainty to investors putting funds into competitive enterprises. Since raw materials are not likely to be removed from a UNE list, the standard for challenging them should communicate that only the most thoroughly supported challenges can succeed. This would help assure investors that when a company uses raw materials as part of its own advanced equipment network, the standard for an ILEC or other party to eliminate the raw materials component of the business plan

(and thus leave millions of dollars of stranded network investment) will be extremely difficult to meet.[12]

The standards for challenging UNEs in the enabling function and business enhancement categories should be lower than the evidentiary standard applicable to raw materials UNEs. This reflects the fact that these categories of UNEs are more likely than raw materials to be replaceable due to market or technological changes. In challenges to UNEs in all categories, however, the burden of proof should be on the party attempting to remove a UNE from a category. The party that seeks to diminish the competitive opportunities available through cost-based UNEs should have the burden of demonstrating that the UNE established by the Commission or the state regulatory authority should no longer be in effect.

B. Identification of UNEs on a Nationwide Basis (FNPRM ¶ 13-14)

The Commission's identification of a minimum national list of UNEs in the *Local Competition First Report and Order* had a salutary effect on the development of competition under the 1996 Act. WCC agrees with the Commission's conclusion that nothing in the Supreme Court's decision calls into question the decision to establish minimum national unbundling requirements.

WCC urges that the Commission, consistent with its intent to "best further the 'national policy framework,'"[13] establish not just a list of UNEs, but the network element framework proposed by WCC. The framework goes beyond a list, and establishes policy guidance for the treatment of UNEs in the future. As states consider adding or subtracting particular UNEs, the network element framework would provide a strong point of reference on the national policy considerations that should guide those decisions. While the states may differ on identity of, for example, particular enabling function or business enhancement UNEs, the network element framework would make clear the importance of nationwide availability of the core raw materials that should be universally available. The network element framework provides a coherent system for analyzing

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[12] WCC does not take the position that the "essential facilities" doctrine provides the proper standard for identifying UNEs. *Cf.* FNPRM ¶ 22-23. WCC notes, however, that if essential facilities analysis is used, the UNEs in the raw materials category would be included under any reasonable definition as essential facilities.

future claims (whether before the Commission or the state regulatory authorities) that certain elements should be available as UNEs.

C. Considerations regarding the "proprietary" and "necessary" standards (FNPRM ¶¶ 15-16, 18-19)

The network element framework proposed by WCC simplifies the inquiry regarding application of the "necessary" and "impair" standards. The raw materials UNEs category would include nothing that is "proprietary" by any reasonable definition of the term. WCC agrees with the Commission's finding in the *Local Competition First Report and Order* that the "necessary" standard applies only to "proprietary" network elements. This is the only reading that gives meaning to the plain language of section 251(d)(2), and neither the Eighth Circuit nor the Supreme Court decisions question the propriety of that reading of the statute. Therefore, the raw materials category of UNEs would be subject to review only under the "impair" standard. The enabling function and business enhancement categories will include some UNEs that raise proprietary concerns and others that do not. In those categories, the application of the "necessary" standard must be assessed on a case-by-case basis.

The scope of the term "proprietary" should be carefully drawn so as not to constrain the availability of necessary information. For example, information on facilities location and availability is critical to the use of raw materials UNEs such as fiber and copper. Information is the key enabling function that makes the UNE meaningful. As WCC has implemented its rights to parity access to fiber information, SWBT has raised concerns about the "proprietary" nature of facilities information on numerous occasions to slow WCC's access to the information and to delay WCC's market entry. ILECs should not be permitted to liberally define "proprietary" standards under the Act in a way that deliberately delays or impedes availability of critical informational resources. WCC urges the Commission to resist anti-competitive efforts to expand the interpretation of "proprietary" to include anything beyond, as the FNPRM suggests at paragraph 15, "information, software, or technology that can be protected by patents, copyrights, or trade secrecy laws ... ."

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[13] FNPRM, at ¶ 13, *quoting* S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 1 (1996) (Joint Explanatory Statement).

D. Considerations regarding the "impair" standard and the availability of network elements outside the ILEC's network. (FNPRM ¶¶ 20-21, 24-31)

The network element framework provides a practical, administrable method for assessing claims regarding the impairment standard. By establishing a "hierarchy" of available UNEs, the network element framework eliminates the need for cumbersome assessments of "impairment" that focus on availability of core network elements on a "street by street" basis. The availability of network elements outside the ILEC's network is duly considered under the framework, but it is considered in the real world context facing new entrants.

One of the key principles behind establishing a network element framework is that it provides certainty that core raw materials will be available at cost-based rates. As discussed above, technology-driven companies like WCC cannot effectively install and operate new equipment, and thus drive the delivery of advanced services, unless the basic transmission and connection media are available that allow the technology to "talk" to the world. As the Commission has recognized in the past, the economic barriers to installation of alternative interoffice, loop, and sub-loop transmission media are prohibitive for almost all new entrants.

In addition, when raw materials are made available, new entrants can greatly expand their offerings, providing ubiquitous services in entire metropolitan or regional areas. Without cost-based access to raw materials, CLECs are stuck in the traditional mode of offering services only to a few central business districts. WCC's experience demonstrates the importance of raw materials to ubiquitous service offerings. For example, in Austin, WCC has collocated equipment in all of SWBT's 22 central offices in the metropolitan area. WCC designed its network to include extremely robust capacity: WCC can initially deliver OC-48 capacity over WCC's SONET rings to every SWBT central office location in Austin. WCC was able to design and execute this high bandwidth network because it has rights to obtain, in this example, interoffice dark fiber as a UNE between all SWBT central offices. WCC's "cageless" collocation rights alone would not have allowed the company to creatively design its networks in a way that would deliver the high bandwidth services made possible by the availability of dark fiber. Similarly, as WCC develops DSL offerings, the availability of unbundled copper is

critical to WCC's ability to design services that can be provided all over its service territory.

In both the fiber and copper examples, WCC does not need ILEC functionalities, personnel, or services. Rather, it must have only the access to the raw materials – the embedded plant built up as an ILEC asset over the last one hundred years – and the information necessary to locate available facilities. When access to those network resources is made available, it provides an incentive for new entrants like WCC to invest in technologies that can spread the benefits of competition to all parts of the geographic areas it serves.

WCC's experiences also belie the claim that non-ILEC providers of raw materials can be counted on to provide a ready alternative for new entrants. WCC submits that in examining such claims, the Commission must look carefully at what is actually available to CLECs. For example, WCC acknowledges that it has alternatives to the ILEC for intercity fiber capacity between, for example, Austin and San Antonio. Several providers could make that available today at competitive prices. The same alternatives are not available, however, for intracity fiber capacity. Even if fiber has been installed by non-ILECs, such facilities have two distinct drawbacks that effectively eliminate them as realistic alternatives. First, the fiber will not be installed ubiquitously to the ILEC central offices where CLEC facilities need to be collocated. Alternative fiber runs are of little use to a CLEC designing a citywide network if they do not provide citywide connections to ILEC central offices, and WCC is aware of no alternatives in any market area that provide significant interoffice coverage. Second, even where fiber is installed, the alternative provider is under no obligation to provide it to a requesting CLEC.

An example of this phenomenon can be found in WCC's home base of Austin. In Austin, Time Warner is the city's cable provider and also operates a CLEC. In the past few years, Time Warner has made investments in fiber upgrades in Austin reported to cost approximately $250 million. To WCC's knowledge, Time Warner's network upgrades make it the largest owner of fiber resources in Austin outside the ILEC network. In spite of this massive investment, however, Time Warner's fiber is connected to only a handful of the 22 SWBT central offices in the Austin area. If this fiber was available to WCC, it would not provide anything even approaching the coverage

necessary for WCC to operate the ubiquitous networks it has in place using ILEC dark fiber. Even more important, none of the Time Warner fiber is available to WCC. Time Warner chooses not to sell its dark fiber to competitors, and has refused offers from WCC to buy some of its excess capacity. In such situations, ILEC claims about the amount of investment in fiber or the miles of fiber constructed by competitors do not prove that the raw materials necessary to build competitive networks are actually available anywhere outside the ILEC network.

As these examples demonstrate, it is extremely important that the raw materials UNE category be established in a way that rebuffs simplistic challenges to the availability of these vital UNEs. Alternatives to the ILEC network elements must be considered, but they must not be judged based on a "micro" vision that divorces the issue from the real world circumstances facing new entrants. The question of whether a CLEC can buy alternative copper or fiber transmission media is a more complicated and competitively critical inquiry than the question of whether, for example, a competitive directory assistance product is readily available. Moreover, a CLEC's impairment (including cost differentials, time to market considerations, and all other relevant factors) is considerably heightened when raw materials are at stake. The network element framework recognizes that the threshold for eliminating any raw materials UNEs under the section 251(d)(2) impairment standard must be extremely high. If such a high standard is in place on a nationwide basis in the network element framework, it will make investment in innovative technology-driven business plans much more attractive, thus speeding deployment of advanced services.

IV. Application of Criteria to Particular Network Elements (FNPRM ¶¶ 32-35)

As emphasized throughout these comments, WCC believes that the goals of this proceeding will best be met if the Commission establishes a network element framework that creates a consistent basis for identifying UNEs. In applying this framework to particular network elements, WCC suggests that a comprehensive set of network raw materials be included in any list of network elements that results from this proceeding.

In particular, WCC strongly urges the Commission to act on the ideas presented in paragraphs 33-35 of the FNPRM regarding unbundling of dark fiber, sub-loop at any

technically feasible point in the ILEC networks, and unbundling of certain ILEC facilities on the end user side of the demarcation point. Both technological advances and experience in the marketplace since adoption of the *Local Competition First Report and Order* clearly justify modification of the minimum network element list to include these vital raw materials UNEs.

The pace of technological change in communications has increased rapidly since the adoption of the *Local Competition First Report and Order.* As technology develops, it has become increasingly clear that efforts to regulate markets based on technological choices are not only poor policy, but are doomed to fail. The best way to facilitate expansive use of advanced technologies is not to focus on the technologies themselves, but to make the network elements that can deliver those technologies available at cost-based rates. That is one of the central reasons why WCC advocates a strong commitment by the Commission to the concept of raw materials UNEs. Our company's experience is that if the raw materials are widely available, competitors will find ways to incorporate them into their networks. If there is bandwidth, to paraphrase an oft-quoted movie line, they will come.

Tracking along with the technology changes, marketplace demands also justify wider availability of raw materials UNEs. As demand for faster data services has soared, the market for DSL and other high speed telecommunications applications has exploded. In the DSL context, many of the recent debates between ILECs and new entrants have focused on the availability of raw materials, i.e., the copper loops and equipment installed in ILEC outside plant that affects provision of high speed data services. Unless the ILECs are to be allowed to dominate advanced services markets, it is imperative that raw materials in the ILEC plant be fully unbundled and available at cost-based rates. The Commission should reject ILEC efforts to limit unbundling to network elements used in provisioning traditional circuit-switched voice services. These types of limitations are contrary to the purpose of the 1996 Act, and could not be more poorly timed for the development of competition.[14]

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[14] In a complaint case brought by WCC, the Texas Commission recently rejected arguments by SWBT that UNEs could be used only for traditional voice services to end user customers. *See Complaint by Waller Creek Communications, Inc. For Post-Interconnection Dispute Resolution With Southwestern Bell Telephone Company*, Public Utility Commission of Texas Docket Nos. 17922 and 20268, Second

Identifying dark fiber as a UNE is essential to the development of technology-focused entrepreneurial firms like WCC. WCC's ability to rapidly move into the emerging DSL market, as well as its capability to offer high bandwidth wholesale offerings to other providers, could not have occurred without the PUCT's identification of a dark fiber UNE. WCC would not only be impaired, but simply could not have designed and executed the networks it is deploying today without availability of dark fiber and parity access to fiber location information.

Several states have already identified dark fiber as a UNE. The analysis undertaken by the states draws on the same raw materials construct urged by WCC in this proceeding. For example, the Washington State Utilities & Transportation Commission explained its rationale for establishing a dark fiber UNE as follows:

> As a form of spare capacity, "dark" fiber is not fundamentally different than "dead" copper. Once either transmission media runs underground or on poles, it ceases being "inventory" for general use. It is committed to carrying traffic on a specific route. At that point, it becomes an element of the carrier's network. Neither form of transmission media is a proprietary element so there is no need to consider whether it is "necessary" to unbundle them. There is greater impairment to a CLEC's ability to provide competing services from withholding "dark" fiber than "dead" copper because the CLEC can match fiber's capacity to its needs by attaching higher or lower capacity electronics to the fiber. A mismatch between electronic capabilities and CLEC needs would increase costs or reduce its ability to provide competing services.[15]

As the Washington Commission decision recognized, the distinction between fiber and copper is not the important point from the standpoint of identifying UNEs. The key is that an ILEC's unused capacity that is committed to carrying traffic is a network element that must be made available. Similarly, the capacity available in the sub-loop should be unbundled to permit high speed services to be delivered by CLECs to their customers. Additionally, high speed loops (e.g., DS-3 loops) that include facilities at the customer

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Order on Appeal of Order Nos. 9 and 2 (April 23, 1999). In WCC's case, SWBT attempted to impose use limitations on existing UNEs (most notably, dark fiber). The strategy is intended to shut down competition where competitors are well-positioned to offer attractive alternatives to the ILECs. This approach should be rejected by the Commission in all the forms in which it offered by the ILECs.

[15] *In the Matter of the Petition for Arbitration of an Interconnection Agreement Between AT&T Communications of the Pacific Northwest, Inc. and GTE Northwest, Incorporated*, Washington UTC Docket No. UT-960307, Commission Order Approving Interconnection Agreement, at 19-20 (1997).

premises must also be unbundled to permit completion of high speed services by CLECs over unused ILEC transmission capacity.

In identifying raw materials network elements for unbundling, the Commission should seek to implement a policy that encourages efficient use of the monopoly network resources. ILECs should not be allowed to withhold the unused capacity of their raw materials, wherever they exist in the topology of the network. It is both anti-competitive and economically inefficient to allow, for example, ILEC fiber to sit fallow while at the same time insisting new entrants construct duplicative facilities. This permits the ILEC to create artificial scarcity of network resources while retaining sole control over elements of the network that are vital to the success of competition. If raw materials are not required to be offered at cost-based UNE rates, the ILECs can abuse their control of the embedded network to demand excessive rates for use of raw materials, or withhold access to the raw materials altogether.

Unbundling at the sub-loop level and availability of raw materials like dark fiber at cost-based rates prevent these abuses, and promote economically efficient uses of the network. As it establishes a framework for identifying UNEs, the Commission should explicitly expand its current list of UNEs to include these vital raw materials as it identifies minimum UNEs standards applicable nationwide.

V. Conclusion

Waller Creek Communications, Inc. appreciates the opportunity to provide its comments in this extremely important proceeding. The Commission's actions in this matter will have a dramatic impact on the business of entrepreneurial, technology-focused telecom companies like WCC. WCC urges the Commission to adopt a network element framework for identifying UNEs that will meet the demands of the Supreme Court's decision while also providing the "rules of the road" for future determinations regarding network elements. In establishing that framework, WCC believes that the lessons of technological and marketplace developments since the *Local Competition First Report and Order* support an approach that encourages investment in technological innovation by ensuring the cost-based availability of raw materials and the information and resources needed to utilize them.

Respectfully submitted,

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